

REMARKS

Initially applicants would like to thank Examiner Wang for granting an interview and for his time spent in the interview.

Claims 1-22 are pending in the application. Independent claims 1, 16 and 22 are amended as discussed at the interview to clarify that the control electrode is "directly" under the gap (between adjacent pixel electrodes).

Claims 1-4, 10-16, 18, 19, 21 and 22 are rejected as unpatentable over TAGUSA et al. 5,946,065 in view of SEO et al. 6,445,435 and further in view of applicants' disclosed prior art. This rejection is respectfully traversed.

As pointed out at the interview, it is acknowledged by the Examiner that TAGUSA fails to disclose control electrodes each disposed under the gap between adjacent pixel electrodes. As further pointed out at the interview and as set forth below, SEO et al. also do not teach this feature. Applicants' disclosed prior art is only cited for the teaching of an LCD layer between two substrates and does not teach control electrodes each disposed directly under the gap between adjacent pixel electrodes.

As noted at the interview, Figure 2B of SEO, which is offered in the Official Action, does not show a gap between adjacent pixel electrodes. Therefore, it would appear impossible

to conclude that a control electrode is directly under a gap between adjacent pixel electrodes when no gap exists.

Moreover, as pointed out at the interview, SEO et al. teach various embodiments of a storage capacitor so that the LCD has a high aperture ratio. SEO et al. do not require that the storage capacitor is formed by a control electrode over the gate line and, in fact, teach away from such structure in the embodiment of Figure 3C.

As pointed out at the interview, based on the teachings of SEO et al., each of the embodiments of SEO et al. should work equally well to form a storage capacitor so that the resultant LCD has a high aperture ratio. The Examiner cannot use impermissible hindsight reasoning to choose one embodiment from a plurality of embodiments and then conclude that the chosen embodiment would be obvious. Such picking and choosing does not rise to the level of obviousness required under §103.

Even if one of ordinary skill in the art were motivated to choose the embodiment of Figure 2B of SEO et al. over the other embodiments of SEO et al., there is no teaching or suggestion in the references to place a control electrode directly under a gap between adjacent pixel electrodes. Accordingly, it would not be obvious to have a control electrode directly under a gap between adjacent pixel electrodes and directly overlying a gate line as recited in independent claims 1, 16 and 22.


Claims 5-9, 17 and 20 are rejected as unpatentable over TAGUSA et al. in view of SEO et al. and applicants' disclosed prior art and further in view of YAO et al. 5,682,211. This rejection is respectfully traversed.

YAO et al. is only cited for the teaching of a control electrode having the same potential voltage as a source electrode. YAO et al. do not teach or suggest what is recited in claims 1 and 16. As set forth above, the combination of TAGUSA et al., SEO et al. and applicants' disclosed prior art does not teach or suggest what is recited in claims 1 and 16. Since claims 5-9, 17 and 20 depend from one of claims 1 and 16 and further define the invention, the proposed combination of references would not render obvious claims 5-9, 17 and 20.

In view of the present amendment and the foregoing remarks, it is believed that the present application is in condition for allowance. Reconsideration and allowance are respectfully requested.

Respectfully submitted,

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